

The challenge of low-power operating is very alluring to many hams. For some, though, just going QRP (transmitting 5 watts or less) isn't enough of a challenge. Welcome to the world of QRPp!

When QRP Just Won't Do...

You Can Do a Lot With Less Than a Watt!

BY BILL MINIKIEWICZ,* W4FSV

Ever since acquiring a Ten-Tec Argonaut 509 in 1976, I have been an active and enamored QRPer. I have worked all states, earned QRP DXCC and even came in first place one year in the ARRL Field Day QRP class. Over the years, I have built just about every QRP kit out there and there are currently nine (9) QRP rigs in my shack.

At some point, a true low-power fanatic just can't get enough. I reached that point in 2010, when I gave in to my

urge for more ... or in my case, less! That's when I decided to build a crystal-controlled, three-transistor, 200-milliwatt, 40-meter transmitter with a 2N2222 final. I already had the perfect mate for the little rig ... a simple regenerative receiver that left plenty to be desired, but worked well enough if you have a good ear.

Giving it a Go...

Late on a Saturday night, I finished building the little rig on a wooden breadboard (Photo A) and quickly assembled an operating position on my workbench including the regen receiver, a 40-meter dipole, 12 volts worth of "AA" cells and

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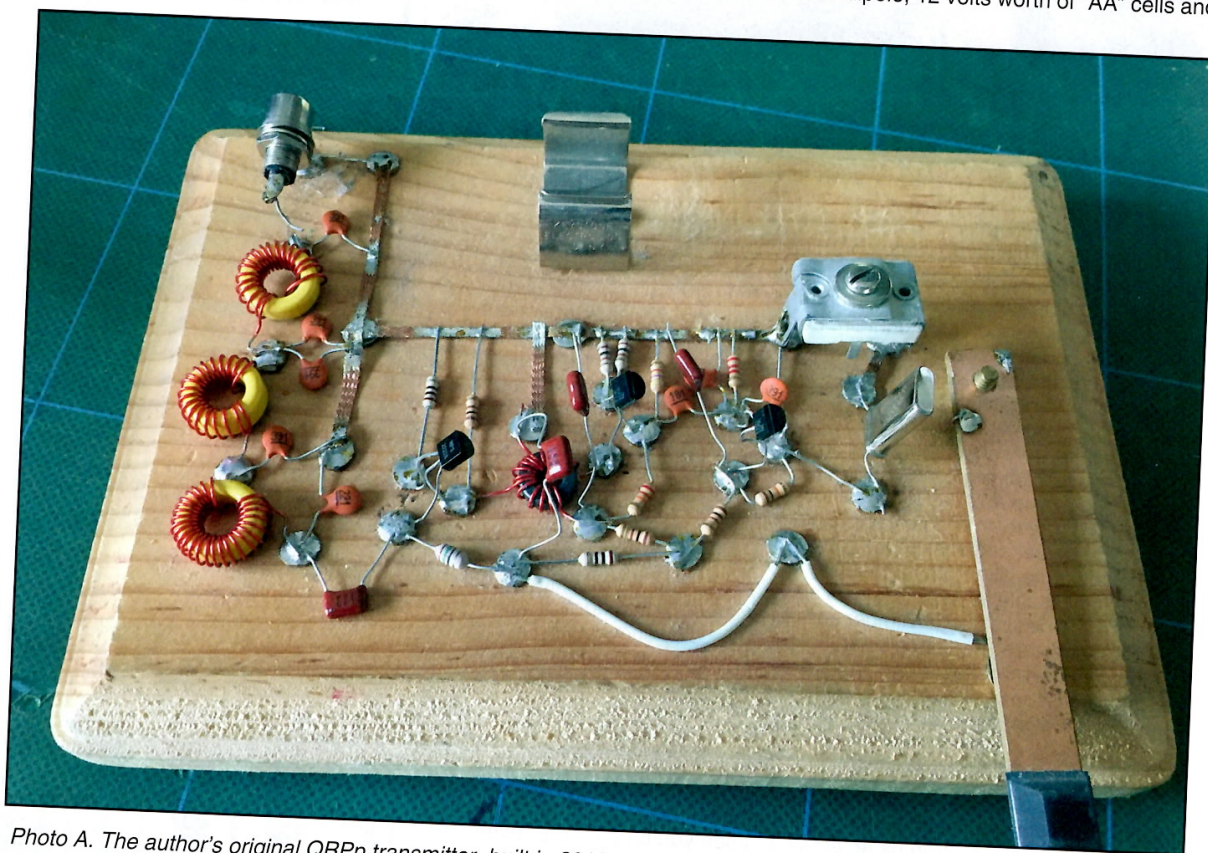


Photo A. The author's original QRPp transmitter, built in 2010 on a wooden breadboard.

0448	ET1A	X	579	579	7010	A1	10	K
61810		X	599	599	10105	A1	10	K
0346	VK4SU							
6/15/10		X	559	449	14020	A1	8	K
0702	CQ							
7/3/10		KA4KSB	599	599	3560	A1	5	K
0320	CQ							
7/31/10		WA4YHA	569	599	3565	A1	5	K
0405	WA1HFF							
2225	CQ	X	579	449	7030	A1	200	mW
8/2/10		WB4OFT	599	579	7030	A1	200	mW
0239	WA9S							
0/9/10		X	559	449	7030	A1	200	mW

Photo B. A page from W4FSV's 2010 logbook. Note the last three entries, showing a power output of 200 milliwatts in the right-hand column.

a simple (though awkward) T/R arrangement. It seemed like forever, but finally at 0405 UTC, the little regen offered up a pretty good signal right on 7030 kHz. After flipping switches and turning knobs, I pounced, "WA1HFF de W4FSV K." Needless to say, I was thrilled to receive an RST 449 report from Steve in Massachusetts, only 727 miles away! Many more rewarding contacts followed with that simple station (Photo B).

A Decade Later

Since that muggy July night in 2010, I have devoted much of my time to designing, building, sharing and, most of all, enjoying QRPp ... the subset of the QRP "big guns" running more than a watt. This past Field Day, almost 10 years from my QRPp awakening I decided to run a little experiment. I wanted to see what was workable when there was a point incentive attached to a QRPp signal. So, for the 2020 Field Day I operated with one watt or less for about four hours.

Using that same dipole from my 2010 experiment, I worked a total of 56 stations in 29 sections. Thirty-five of the contacts were made using just 100 milliwatts. Granted, using an Elecraft K2 was an advantage in the Field Day QRM. I also operated 20 meters some of the time, a fact that netted me a 1,936-mile contact, or 19,360 miles per watt while running 100 milliwatts.

Try it Yourself!

While results do vary and I make no claim of scientific results, I can honestly say that I was rewarded with that same satisfaction from every QRPp contact ... just like that night back in 2010.

You CAN teach an old dog NEW tricks...



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